REMARKS/ARGUMENTS

REMARKS

The Invention Disclosure Statement included with this amendment lists United States Patents to Freeman and Marciano-Agostinelli, relied on by the examiner in application Serial No. 10/614,114. The Invention Disclosure Statement also lists other patents to show the state of the art in the field of lubrication materials.

The amendments to the written description describe the material for decreasing friction as "a solid inorganic lubricant." Original claim 5 of the parent application (Serial No. 08/487,436 filed June 7, 1995) claims the invention as a "composition . . . wherein said material for decreasing friction comprises a solid inorganic lubricant. . . ." (emphasis added) and therefore supports this amendment.

The amendment to claim 73 now describes the metal nitride material for lubricating a surface as a particulate material which the written description of the parent application, at page 17, paragraph two. Claiming the metal nitride as a particulate material distinguishes Takayama, United States Patent No. 5,792,717 which describes an article of manufacture based on a boron nitride monolith or ceramic.

The amendment further describes the lubricating material as a silicate which the written description of the parent application supports at page 14, first full paragraph and page 24 last paragraph by the recitation of the materials "asbestos," and "talc," and page 15 first full paragraph, line 3 and page24, line 6 from the bottom by the disclosure of "mica." The amendment also characterizes the lubricating material in claims 73 and 76 as a chalcogen compound, which the written description of the parent application supports at page 17, paragraph two. The amendment to claims 77 and 83 add "mica," which the written description of the parent application supports as noted above.

The present invention no longer excludes silicates for the reason that the Martineu reference relied on by the examiner does not teach or suggest a silicate/superabsorbent polymer combination. Martineu does not teach the use of the same polymer as claimed by the applicant, but rather polymers that absorb from one to about three times their weight in water (100% to 300%). The composition claims of the invention call for the use of a superabsorbent polymer that absorbs at least about 100 times its weight in water, i.e., applicant's superabsorbent polymers absorb anywhere from about 35 to about 100 times more water than the Martineu polymers.

The amendment additionally defines the claim 73 materials by describing the "silicate, . . . phthalocyanine" components as "compounds," and the material for lubricating a surface as optionally including an additional lubricant such as an "organic lubricant. . . ." The original claim language intended this meaning, but now specifies it to avoid ambiguity.

The written description of the parent application supports the phrase "mixtures thereof" in subparagraph "(4)" of claim 73 to indicate that the invention includes mixtures of lubricants. Page 23, penultimate paragraph states that the invention relates to "various mixtures of each of the foregoing lubricants. . . . " whereas page 25 first paragraph notes that "mixtures of the solid or particulate lubricants (of the invention) can be used. . . ." and paragraph 2 notes that the invention also includes the use of "mixtures of the organic lubricants. . . ." Applicant also points out that the paragraph bridging pages 25 and 26 of the parent application describes "mixtures of the solid or particulate organic lubricants. . . ." comprise some of the lubricants employed according to the invention, and that the first full paragraph on page 26 further describes the lubricants of the invention as "combinations of the solid or particulate inorganic lubricant and the solid or particulate organic lubricant. . . ." Page 12, first full paragraph of the present application supports the amendment to claim 73 that now describes the phosphate of subparagraph "(2)" of this claim as an "organic phosphate."

Claims 80-82 describe the superabsorbent polymer as comprising " a polymer of acrylic acid, an acrylic ester, acrylonitrile, acrylamide, co-polymers thereof or mixtures thereof" which claim 90 supports. The amendments to claim 90 address the change in multiple dependent claim formatting required by this amendment.

All amendments to the written description and the claims in the present application and all previous amendments to the written description and the claims in the present application, and any amendments to the written description and claims of each of the applications from which the present application depends are not intended to and do not abandon any patentable equivalents of the elements of applicant's invention, or patentable equivalents of applicant's invention as a whole, or claim of priority to any of such inventions.

THE PROVISIONAL OBVIOUSNESS DOUBLE PATENTING REJECTION AND TRAVERSE

The examiner provisionally rejects claims 73-100 under the judicially created doctrine of obviousness-type double patenting based on copending applications Serial Nos. 10/763,687 and 10/614,114. Applicant traverses the rejection since neither copending application has issued as a patent, Applicant further requests that the examiner allow the present application, if neither of the copending applications issues, and the only rejection remaining in the present application consists of the provisional obviousness-type double patenting rejection. If one of the co-pending applications issues as a patent, applicant reserves the right to distinguish the claims in this application from the claims of the copending application or applications in the event this application still remains as a pending application at the time of issue of one of the other applications.

THE REJECTION UNDER 35 U.S.C. §112 FIRST PARAGRAPH AND TRAVERSE

The examiner rejects claims 73 and 76, under 35 U. S. C. § 112, first paragraph. Applicant traverses the rejection and requests further consideration and reexamination.

The examiner takes the position that the "specification does not support the language regarding a lubricating metal and alloy, lubricating metal oxide, nitride or carbonate." The examiner concludes "Nowhere in the specification is it taught that every alloy and every metal is within the scope of the specification." (August 15, 2005 Office Action, p.4, 2nd full par.)

The amendment to the written description, which inserts verbatim the language of original claim 5 of the parent application describes the material for decreasing friction of the present invention as comprising a "solid inorganic lubricant," a teaching that the invention comprises the use of art known lubricant metals, alloys, and lubricant compounds of such metals. The specification also lists multiple examples of these lubricants, including metal carbonates, nitrides, barrier layer metal lubricants and compounds of metals, and other inorganic organic lubricants and addresses the skilled artisan who knows these lubricants. Applicant does not have to list all of them in the application, since the applicant did not invent the art known "solid inorganic lubricants," but rather the combination of these lubricants with superabsorbent polymers. In setting out his invention in the specification, the applicant "may begin at the point where his invention begins, and describe what he has made that is new, and what it replaces of the old. That which is common and well known [such as "solid inorganic lubricants"] is as if it were written out in the [application] . . . ." Webster Loom Co. v. Higgins, 105 U.S. 580, 586 (1881).

The applicant has not listed all of the "solid inorganic lubricants," nor does he have to. The prior art has done this for him. The Invention Disclosure Statement included with this amendment shows that the classified United States Patents describe many of these art known "solid inorganic lubricants" prior to the filing date of the present application, namely patents classified in Class 508, subclasses 121, 123, 124, 129, 150, 178, and 180 inter alia, which includes lubricant compositions based on "metals," "alloys,"

"silicon," "other inorganic materials" (e.g., "nitrides" etc.), or inorganic materials including metal chalcogenides (e.g., "oxides," "sulfides" etc.) and metal "carbonates."

Applicant has amended the application during prosecution to further define what he regards as his invention, but he can do this. The Manual of Patenting Examining Procedure (M.P.E.P.) clearly indicates this, stating that "the invention set forth in the claims must be presumed, in the absence of evidence to the contrary, to be that which the applicant regards as the invention. . . . The second paragraph of 35 U.S.C. 112 does not prohibit applicants from changing what they regard as their invention during the pendency of the application." (M.P.E.P. § 2172, I and III, p. 2100-193, August 2001) (citations omitted).

The examiner then rejects claim 76 because it allegedly lacks support in the written description for all metal materials that provide barrier layer lubrication. The prior art as cited in the attached Invention Disclosure Statement as well as the written description of the parent application at p. 15, line 1 et seq. support all metal materials that provide barrier layer lubrication. The present amendment to page 20 of the written description, based on claim 5 as originally filed also supports this aspect of the invention. Applicant does not have to name all of these materials that provide barrier layer lubrication, since they comprise prior art materials, and the courts construe the application as though these materials were set out in the written description. Webster Loom, 105 U.S. at 586.

The examiner also rejects claim 89 allegedly for lacking support in the specification for a composition that is substantially anhydrous. The written description of the parent application supports a composition that is substantially anhydrous at p. 29, 2nd par.

THE REJECTION UNDER 35 U.S.C. §112 SECOND PARAGRAPH AND TRAVERSE

The examiner rejects claims 73, 77, 89, and 90 under 35 U. S. C. § 112, second paragraph. Applicant traverses the rejection and requests further consideration and reexamination.

The examiner queries how the claim 73 phosphates of subparagraphs "(1)" and "(2)" differ. Applicant has clarified this by now amending the subparagraph "(2)" phosphate to indicate it comprises an "organic phosphate," whereas the subparagraph "(1)" phosphate was previously characterized in claim 73 as comprising a "metal. . . phosphate. . . ."

The examiner rejects claim 77 as lacking support in the dependent claim 76 for the terms "disulfides, chlorides, selenides, sulfates, iodide and borax (sodium borate)." Claim 76 recites "halides" thereby supporting the terms "chloride" and "iodide." Claim 76 also recites "an inorganic chalcogen compound" which supports "disulfides," "selenides," "sulfates," and "borax" (sodium borate). Applicant points out the chalcogens comprise oxygen, sulfur, selenium, tellurium and polonium.

The examiner has not specified a particular rejection applicable to claim 89, and for that matter claim 90. Applicant therefore cannot provide a response to the rejection.

THE REJECTION UNDER 35 U.S.C. §102 (e) AND TRAVERSE

The examiner rejects claims 73, 74, 74, 76, 77, and 90 under 35 U. S. C. § 102 (e) as anticipated by Takayama, United States Patent No. 5,792,717. Applicant traverses the rejection and requests further consideration and reexamination.

The examiner cites Takayama for the disclosure of a monolithic boron nitride ceramic body article of manufacture that has open pores filled with a water absorbing resin. This is not applicant's particulate boron nitride composition combined with a superabsorbent resin. To apply this reference to

reject the present claims would require taking the Takayama article and using it to lubricate a substrate, e.g., putting the Takayama article of manufacture between two sliding surfaces that frictionally engage one another. Standing by itself, it does not teach applicant's claimed particulate composition.

The examiner also states that " Takayama teaches the composition has lubricity properties (see col.4, lines 30-43)." (August 10, 2005 Office Action, p. 4, 1st par.) Applicant respectfully disagrees. This section of the Takayama reference only describes the porosity of the monolithic ceramic substrate. It does not say anything about the lubricity of the combination, but only that water can provide increased lubrication, by impregnating the water absorbing polymer into the porous ceramic in increased amounts. The inventor achieves this by employing a monolithic ceramic material with relatively high porosity. Takayama therefore does not anticipate applicant's claimed particulate metal nitride lubricating composition.

THE REJECTION UNDER 35 U.S.C. §103 (a) AND TRAVERSE

The examiner rejects claims 73-76, 80-82, 86, 87, 89-93, 96, 99, and 100 under 35 U. S. C. § 103 (a) as unpatentable over Johnson, United States Patent No. 5, 275,760 in view of Obayashi et al. United States Patent No. 4,340,706 ("Obayashi"). Applicant traverses the rejection and requests further consideration and reexamination.

Johnson does not teach or suggest:

A lubricating composition of matter comprising a polymer, where the polymer comprises a superabsorbent polymer that absorbs greater than about 100 times its weight in water combined with a material for lubricating a surface wherein the material for lubricating a surface comprises:

(1) a lubricating metal and alloy thereof, a lubricating metal chalcogenide, halide, carbonate, silicate or phosphate, or a particulate lubricating metal nitride, or a carbon lubricant; or

(2) a silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound;

(3) where the material for lubricating a surface optionally contains a lubricant comprising an, organic lubricant, inorganic lubricant, or water, or a lubricant additive; or

(4) mixtures thereof.

On the contrary, Johnson describes the use of "oils" with a polymer, noting that "[o]ils are a suitable carrier medium [that] . . . . include fixed oils such as glycerol fatty acids, lubricating oils, mineral oils, hydrocarbon oils such as crude petroleum, residual refinery oils from bottom streams, diesel oils, fuel oils and the like. In the present method, a food grade mineral oil is preferred. . . . " (Johnson, col. 4, lines 24-29). These bear no chemical resemblance to the claim 73 inorganic materials for lubricating a surface or the "silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound" class of materials for lubricating a surface.

The examiner correctly distinguishes the broader teachings of Johnson at page 7 of her August 10 Office Action, i. e., Johnson fails to teach applicant's intended use, although the examiner argues intended use does not lend patentable weight to applicant's invention, and Johnson fails to teach superabsorbent polymers, i.e., polymers that absorb more than about 100 times their weight in water. Applicant nonetheless distinguishes the reference not only for the reasons given by the examiner, but also as noted above because it fails to teach or suggest the use of an inorganic lubricating material or the "silicate ester, polyphenyl ether, organic phosphate, biphenyl, phenanthrene, or phthalocyanine compound" class of materials for lubricating a surface. Obayashi does not overcome these deficiencies of the Johnson reference.

The examiner rejects claims 73, 74, 76, 89, and under 35 U. S. C. § 103 (a) as unpatentable over Martineu et al., United States Patent No. 4,977,192 ("Martineu"). Applicant traverses the rejection and requests further consideration and reexamination.

The examiner in applying the disclosure of Martineu concludes that Table IV of the reference teaches polymers that absorb from 100% to over 300% water, and points out the previous teaching of the reference describes combinations of the polymer with these various clay-like materials. Applicant distinguishes the reference on the grounds that polymers that absorb from 100% to over 300% water are not superabsorbent, i.e., they only absorb from one to three times their weight in water, whereas the superabsorbent polymers of the present invention absorb greater than about 100 times their weight in water. Martineu does not teach or suggest these or any other superabsorbent polymers.

CONCLUSIONS

Applicant requests the Examiner to withdraw the rejections in view of the foregoing amendments and remarks and pass the application to issue.

Respectfully submitted,

THE LAW OFFICES OF ROBERT J. EICHELBURG

August 31, 2005

By: _____

Robert J. Eichelburg, Reg. No. 23,057

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August 31, 2005

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